

Notice of Allowability

Application No.

10/619,604

Examiner

Gary L. Laxton

Applicant(s)

KIM ET AL.

Art Unit

2838

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 9/14/2005.
2. ☒ The allowed claim(s) is/are 1,3-7 and 9-27.
3. ☒ The drawings filed on 16 July 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Gary L. Laxton
Primary Examiner
Art Unit: 2838

9/29/05

DETAILED ACTION

Allowable Subject Matter

1. Claims 1, 3-7 and 9-27 are allowed.

2. The following is an examiner's statement of reasons for allowance:

Claims 1, 3-5 and 25; prior art fails to disclose or suggest, inter alia, a power supply controlling device comprising a pulse width modulating unit controlling the operation of a first switching unit; and a power supply controlling unit outputting a signal controlling the pulse width modulating unit, wherein the pulse width modulating unit switches the first switching unit depending on a reception of a power-on signal which is supplied externally, wherein the power supply controlling unit comprises: a USB interface unit; a power supply switch selecting a power on/off signal in response to a power on/off signal received from a host computer connected through the USB interface unit and outputting a trigger signal indicative thereof; a second switching unit connected to a power supply terminal of the USB interface unit and turned on based on the trigger signal from the power supply switch; and a photo coupler comprising a first light emitting device and a phototransistor applying a signal to the pulse width modulating unit, wherein the first light emitting device is connected to the second switching unit and disposed to emit light in response to the turn-on signal of the second switching unit.

Claims 6, 7 and 9-13; prior art fails to disclose or suggest, inter alia, a power supply controlling device comprising a pulse width modulating unit; a power supply switch providing a power signal from a user; a power supply controlling unit outputting a control signal to the pulse

Art Unit: 2838

width modulating unit to control a first switching unit to perform an on/off operation corresponding to the power on/off signal from the user; a second switching unit performing a turn-on operation according to the power signal; and a photo coupler connected to the second switching unit, wherein the photo coupler comprises a first light emitting device to emit a light in response to the turn-on operation of the second switching unit, a phototransistor to provide the pulse width modulating unit with a signal that corresponds to the emission of the light from the first light emitting device, and an auxiliary power supply to supply power to the second switching unit.

Claims 14-24; prior art fails to disclose or suggest, inter alia, a system connecting a printer and a host computer, comprising a DC/DC converter; an input unit receiving a printing command; and a power supply controlling device comprising a first switching unit, a pulse width modulating unit, a power supply switch providing a power on/off signal from a user, and a power supply controlling unit outputting a control signal to the pulse width modulating unit to control the first switching unit to perform an on/off operation corresponding to the power on/off signal from the user, wherein a signal processing unit receives a power-on signal from the host computer through the USB interface unit or from the power supply switch.

Claims 26 and 27; prior art fails to disclose or suggest, inter alia, a power supply controlling device comprising a first switching unit; a pulse width modulator unit; a power supply controlling unit outputting a control signal to the pulse width modulator unit to control the first switching unit to perform an on/off operation corresponding to the power on/off signal received from a host computer connected through a USB interface unit and outputting a trigger signal indicative thereof, wherein the power supply controlling unit further comprises a second

Art Unit: 2838

switching unit connected to a power supply terminal of the USB interface unit and turned on based on the trigger signal from the power supply switch.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

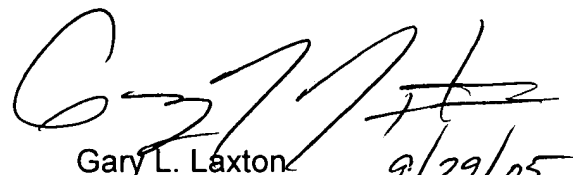
3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6,928,562 Cohen et al discloses a system for managing power in a system having an internal USB hub; US 6,939,616 Kim discloses a power supply and power supply control device; US 6,907,492 Matsuda et al disclose a USB interface circuit; US 6,782,484 McGowan et al disclose an apparatus for lossless resume capability with peripheral devices; US Kubo et al disclose a USB device and USB connecting system; US 6,662,301 Sekine et al disclose a computer peripheral device, control method and computer; US 6,275,949 Watanabe discloses a power controller for a peripheral device; US 5,799,196 Flannery discloses an apparatus providing power management; US 5,167,024 Smith et al disclose a power management system.

Art Unit: 2838

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary L. Laxton whose telephone number is (571) 272-2079. The examiner can normally be reached on Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on (571) 272-2084. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Gary L. Laxton
Primary Examiner
Art Unit 2838
9/29/05